

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1-15 (CANCELED)

16. (CURRENTLY AMENDED) A sensor for measuring a component in blood by causing a redox reaction of the component and detecting an oxidation current or a reduction current caused through the redox reaction by an electrode,

wherein the sensor comprises:

a first analysis portion comprising a first electrode system on which at least an oxidoreductase that acts upon the component and a mediator are provided; and

a second analysis portion in which a Hct value of the blood is measured, comprising a second electrode system that comprises a working electrode and a counter electrode, a mediator being provided on the counter electrode but not on the working electrode for measuring the Hct value,

[[in]] the first analysis portion measures [[.]] the component in the blood ~~is measured~~ by causing a redox reaction between the component and the oxidoreductase in the presence of the mediator by applying a voltage to the first electrode system and detecting ~~by the first electrode system~~ an oxidation current or a reduction current caused to flow ~~when a voltage is applied~~, and

[[in]] the second analysis portion[[.]] measures the [[a]] Hct value of the blood ~~is measured by supplying the blood~~ supplied to the second electrode system[[.]] by applying a voltage to the blood ~~in this state~~ supplied to the second analysis portion to cause an oxidation current independent of the mediator or a reduction current independent of the mediator to flow between the working electrode and the counter electrode, and detecting a value of the oxidation current or the reduction current.

17. (ORIGINAL) The sensor according to claim 16, capable of correcting an amount of the component based on the measured Hct value.
18. (ORIGINAL) The sensor according to claim 16, wherein the working electrode and the counter electrode in the second electrode system are provided on a same insulating base material so as to be coplanar and spaced apart from each other.
19. (ORIGINAL) The sensor according to claim 16, further comprising a channel for leading blood to the sensor,
wherein the second analysis portion is on an upstream side and the first analysis portion is on a downstream side with respect to flow of the blood supplied from one end of the channel.
20. (ORIGINAL) The sensor according to claim 16, further comprising a channel for leading blood to the sensor,
wherein, in the second electrode system, the working electrode is on an upstream side and the counter electrode is on a downstream side with respect to flow of the blood supplied from one end of the channel.
21. (ORIGINAL) The sensor according to claim 16, wherein the mediator in the second electrode system is a ferricyanide.
22. (PREVIOUSLY PRESENTED) The sensor according to claim 16, wherein the mediator in the second electrode system is potassium ferricyanide.
23. (ORIGINAL) The sensor according to claim 16, wherein, in the second electrode system, the working electrode on which the mediator is not provided is coated with a polymeric material.
24. (PREVIOUSLY PRESENTED) The sensor according to claim 16, wherein, in the second electrode system, the working electrode on which the mediator is not provided is coated with

carboxymethylcellulose.

25. (ORIGINAL) The sensor according to claim 16, wherein, in the second electrode system, the applied voltage is equal to or higher than a voltage causing electrolysis of water.

26. (ORIGINAL) The sensor according to claim 16, wherein, in the second electrode system, the applied voltage is 1 to 10 V.

27. (ORIGINAL) The sensor according to claim 16, wherein, in the second electrode system, the applied voltage is 1 to 6.5 V.

28. (ORIGINAL) The sensor according to claim 16, wherein the first electrode system comprises a working electrode and a counter electrode.

29. (PREVIOUSLY PRESENTED) The sensor according to claim 16, wherein the first electrode system comprises a working electrode and a counter electrode and, in the first electrode system and the second electrode system, at least one of the electrodes or all the electrodes provided in the first electrode system also serve as the counter electrode in the second electrode system.

30. (ORIGINAL) The sensor according to claim 28, wherein, in the first electrode system and the second electrode system, only the working electrode in the first electrode system also serves as the counter electrode in the second electrode system.

31. (ORIGINAL) The sensor according to claim 16, wherein the mediator provided on the first electrode system is a ferricyanide.

32. (PREVIOUSLY PRESENTED) The sensor according to claim 16, wherein the mediator provided on the first electrode system is potassium ferricyanide.

33. (ORIGINAL) The sensor according to claim 16, further comprising an insulating substrate,

wherein the first analysis portion, the second analysis portion, and a channel for leading the blood to the analysis portions are formed on the insulating substrate, and

one end of the channel is open toward an outside of the sensor so as to serve as a blood supply port.

34. (PREVIOUSLY PRESENTED) The sensor according to claim 16, further comprising an insulating substrate,

wherein the first analysis portion, the second analysis portion, and a channel for leading the blood to the analysis portions are formed on the insulating substrate,

one end of the channel is open toward an outside of the sensor so as to serve as a blood supply port,

there is only one blood supply port, and

the channel branches so that ends of branched portions communicate with the analysis portions, respectively.

35. (PREVIOUSLY PRESENTED) The sensor according to claim 16, further comprising an insulating substrate,

wherein the first analysis portion, the second analysis portion, and a channel for leading the blood to the analysis portions are formed on the insulating substrate,

one end of the channel is open toward an outside of the sensor so as to serve as a blood supply port,

the second analysis portion is located in the channel, and

the first analysis portion is located farther from the blood supply port than the second analysis portion.

36. (PREVIOUSLY PRESENTED) The sensor according to claim 16, further comprising an insulating substrate, a spacer, and a cover,

wherein the first analysis portion, the second analysis portion, and a channel for leading the blood to the analysis portions are formed on the insulating substrate,

one end of the channel is open toward an outside of the sensor so as to serve as a blood supply port, and

the cover is disposed on the insulating substrate via the spacer.

37. (ORIGINAL) The sensor according to claim 16, wherein the component to be measured is at least one selected from the group consisting of glucose, lactic acid, uric acid, bilirubin, and cholesterol.

38. (ORIGINAL) The sensor according to claim 16, wherein the component to be measured is glucose, and the oxidoreductase is at least one of glucose oxidase and glucose dehydrogenase.

39. (ORIGINAL) The sensor according to claim 16, wherein a polymeric material, an enzyme stabilizer, and a crystal homogenizing agent further are provided on the first electrode system.

40. (ORIGINAL) The sensor according to claim 16, further comprising a blood detecting electrode,

wherein the blood detecting electrode is located farther from the blood supply port than at least one of the analysis portions so that whether or not the blood is supplied to the at least one of the analysis portions can be detected by the blood detecting electrode.

41. (CURRENTLY AMENDED) A measuring device for measuring a component in blood, comprising:

the sensor according to claim 16;

a holder that holds the sensor ~~according to claim 16;~~

a voltage source for the first electrode system of the sensor;

a detector that detects an oxidation current or a reduction current flowing through the first electrode system;

a calculator that calculates an amount of the component from a value of the detected current;

a voltage source for the second electrode system of the sensor;

a detector that detects an oxidation current or a reduction current flowing through the second electrode system; and

a calculator that calculates a Hct value of the blood from a value of the detected oxidation or reduction current.

42. (PREVIOUSLY PRESENTED) The measuring device according to claim 41, further comprising a corrector that corrects the amount of the component using the Hct value.

43. (ORIGINAL) The measuring device according to claim 41, wherein the voltage applied to the second electrode system is equal to or higher than a voltage causing electrolysis of water.